

# Safeguards Safes

By Sidney Fields

Coleman London and his 14 engineers boast that they're associated with a big growth industry—crime. They're especially interested in bank robberies. That's where the big money is.

Bank assaults have more than doubled in the past five years. Stick-up men, safe-crackers and tunnelers got almost \$5 million in 1,688 attempts on banks in 1964.

London and his boys are happy and busy developing a whole arsenal of weapons to stop this growing larceny. He runs Mosler Research Products, in Danbury, Conn., which explores and makes anti-intrusion devices that use radio waves, infra-red



Coleman London—listens in on crime

rays, heat, sound, radar, tear gas and even smell. They also design bugging and anti-bugging systems.

"This was once known as the bell and buzzer business," said London in his lab recently. "It's now 'electronic security.'"

## Johns Hopkins Man

His latest achievement is a high speed 35 mm. camera that takes 2,400 photos of a bank holdup at the rate of 8 pictures a second. Six major New York and Pittsburgh banks are now installing them.

"The camera is set going from the money drawer, when the teller does exactly what the hold-up man orders him to do," said London.

London, 50, big, almost burly, took his engineering at Johns Hopkins University. His brother and sister are both psychiatrists. Their father was a dress jobber in Baltimore. London's wife, Elinore, is a chemist and their daughter, Phyllis, 18, a math whiz, is at Carnegie Institute.

London's first job out of college was with Westinghouse. It lasted 22 years. Among other things he designed marine and airborne radar and the nose package for the Bomarc missile. He came to Danbury in 1960. The same year one of his lab's metal detectors uncovered the Red-installed mike in the U.S. embassy in Moscow. The detector can reveal wiring buried in a wall. When London and his engineers hatch an anti-intrusion system they promptly set out to defeat it, then build protection against defeating it into the final gadget.

## Hooked into Police Station

✓ Russ Terrell, one of his engineers, was assigned the task of beating a High Security Guard Panel, which sounds an alarm or monitors as many as 50 different detection devices in a given area, like military bases, the intelligence rooms of the CIA or State Department. London counts among his clients all security branches of government.

"That was Terrell's first job when he came here," London said. "He found out that the

the Guard Panel. We found ways to beat his ways. Then we sent it to the military and they couldn't beat it, though they tried hard."

The lab's capacity alarm box creates a field of radio waves near a safe in a bank, a store, a church or a home. The box can be hooked into a police station. Anyone coming within inches of the safe interferes with the radio field and sets off one helluva alarm.

"If they try to cut the wires or tamper with it the bell bangs anyway," London said. "I've tried to fault it. The odds are one in 100 that anyone can."

## Alarm Goes Off

His audio accumulator will not go off in the bank if it registers one noise from a street car, truck or bus going over a bump outside. But if the vault is being drilled or shot at with an anti-tank gun the audio accumulator registers the repeated sounds, sets off an alarm in the bank, at a police headquarters or any security center.

Radar and high-frequency sound waves can detect anyone moving around in a bank after hours. When an intruder penetrates an invisible infra-red beam near a safe, an alarm goes off. A heat detection device above a vault clangs with the first sparks from a torch.

London developed a system that sets off tear gas when there's any vibration against a vault. And he is experimenting with a gas analysis gadget that would reveal an intruder by smell.

Are the thieves aware of all this? They must be. The Florida police found that a man had actually written an instruction book on how to beat all this and get into a safe.

"But the author is now in jail," said London.

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